

Special Issue

Preparation and Application of Nano-Photocatalytic Materials

Message from the Guest Editor

The development of Nano Photocatalysis Technology has scientific potential since it possesses several merits, e.g., efficiency, green and economic. The nano photocatalysis materials can be stimulated to generate carriers (electron and hole) and their secondary free radicals (hydroxyl radical, singlet oxygen, superoxide radicals, etc.) with strong redox ability. The carriers and free radicals can react with the surrounding water and oxygen, and decompose formaldehyde, benzene, dyes and other pollutants, and destroy the cell wall of bacteria, so as to achieve the purpose of eliminating air pollution, antibacterial, environmental water restoration and clean energy production. Some researchers have been placing special emphasis on the mechanisms of nano-photocatalytic reaction and designing experimental systems to optimize the photocatalysis activity of nano-photocatalytic materials, which will open up a new avenue for the preparation and application of nano-photocatalytic materials.

Guest Editor

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